Marketing Natural Gas 101: The Four P’s of Marketing

Place
Product
Promotion
Price
Natural Gas 101:
And the Fifth P

Perception
Perception: Natural Gas Market

Environmentally Good - High Price
Environmentally Bad - Low Price

High Availability - Safe
Low Availability - Dangerous
Perception: Know Your End User

- What is the complete demographic profile of your customer?
- What are they using your product for?
Decreasing Market Growth in Northeast Region

The current Annual Energy Outlook predicts a dip in demand from 2009-2010 until 2023-2024, then demand for natural gas will continue to grow.

Source: http://www.api.org/aboutoilgas/natgas/supply_demand.cfm
Leading Home Heating Fuels, Northeast, Percentage 2008

Source: U.S Bureau of the Census
Marketing Natural Gas 101:

Product
Source: ISO New England
Product: What are the opportunities?

Average emissions for an average New England home

<table>
<thead>
<tr>
<th>Description</th>
<th>CO2 Emissions (lbs/year)</th>
<th>% Change from Base</th>
</tr>
</thead>
<tbody>
<tr>
<td>Base case</td>
<td>48,500</td>
<td></td>
</tr>
<tr>
<td>Energy Efficiency (15% reduction)</td>
<td>46,100</td>
<td></td>
</tr>
<tr>
<td>Fuel Oil Conversion to Natural Gas</td>
<td>39,900</td>
<td></td>
</tr>
<tr>
<td>Electric Transportation</td>
<td>34,800</td>
<td></td>
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<tr>
<td>10% reduction In Power Gen Carbon Intensity</td>
<td>33,280</td>
<td></td>
</tr>
</tbody>
</table>

Annual costs ($)

- Base case: $5,600
- Energy Efficiency: $5,600
- Fuel Oil Conversion: $3,800
- Electric Transportation: $3,300
- 10% reduction In Power Gen Carbon Intensity: $3,300 +

Cost (41%)

Source: Northeast Utilities
Product: Natural Gas Market Factors

Positive Factors
- clean
- reliable
- versatile
- abundant domestic and foreign supply

Negative Factors
- explosive
- fossil fuel
- Constraint distribution
- volatile pricing
Marketing Natural Gas 101:

Place
Place: Natural Gas
Northeast Distribution Network

Interstate Distribution

Local Distribution
Place: Canaport LNG

- Year round ice-free port
- 85-foot water depth at low tide (~45 feet required for LNG tankers)
- Off-loading pier that accommodates largest LNG vessels (~5.7 Bcf QMax ships)
- 8 x 150 MMcf/d vaporizers + 8 discharge pumps yield a discharge capacity of 1.0 Bcfd (1.2 Bcfd peak)
- 3 storage tanks with 9.9 Bcf gas equivalent total storage capacity
- Expandable to 2.0 Bcfd (2.4 Bcfd peak) discharge capacity and 16.5 Bcf of storage with addition of 8 vaporizers/pumps and 2 storage tanks
- Firm pipeline capacity to deliver 730 MDth/d to the Northeast U.S. market
Marketing Natural Gas 101:

Price
Price: Opportunity & Challenge-
Sustained Moderate Gas Prices

Wood Mackenzie Fundamental* Price Forecasts ($2009)

- **WTI Crude**
- **Distillate**
- **Fuel Oil**
- **Natural Gas**

Average WTI Oil Price: $76.97 /bbl

Average differential (oil and gas):
- 1997-2008: $2.39/mmbtu
- 2009-2020: $8.39/mmbtu

Average Henry Hub Gas price:
- 2009: $3.81/mcf
- 2010: $4.45/mcf
- 2010-15: $5.21/mcf

* "Fundamentals" analysis ignores dynamics creating short-term volatility (weather, storage levels) and risk premium associated with forward sales

Source: Northeast Utilities
Marketing Natural Gas 101:

Promotion
Promotion: Market Factors

External Forces
External Barriers
Repositioning & Penetration
Market Message
Promotion: A Unified Message

• Create Three Key Industry Messages
• How Will You Deliver Those Messages?